

REMARKS

Summary of Office Action

Claims 1-10 are pending.

Claims 1-10 have been rejected under 35 U.S.C. § 102(e) as anticipated by Escobar et al. U.S. patent No. 5,826,102 ("Escobar").

Applicants' Reply

Applicants respectfully traverse the prior art rejection of claims 1-10.

As previously submitted, applicants' invention "relates to the representation, transmission, processing and display of [object-based] video and audio-visual information." In object-based coding, high-level structure of visual content "is described in terms of 'objects', which have immediate visual relevancy, representing familiar physical objects, e.g., a ball, a table, a person, a tune or a spoken phrase.", The objects are "independently encoded using a compression technique that gives best quality for each object." A data bitstream which includes the encoded- object information is received and processed at a video or audio-visual (AV) terminal. The received bitstream also includes composition information and scene demarcation information associated with the encoded object information. The composition information may include parameters such as displacement from the upper left corner of the presentation frame, rotation angles, zooming factors. The composition information is used to compose a scene (e.g., place an object in a scene). The bitstream structure allows on-line editing of the objects in the bitstream for enhanced display or visualization. The AV terminal then "decodes the objects and positions them in the scene as specified by the composition information." (See e.g., Abstract, page 1 lines 7-20, Summary of Invention at page 1 line 27 to page 2 line 10, FIGS. 2a-2c, and page 6 lines 10-14).

Independent claims 1, 8, 9 and 10 are directed toward various versions of applicants' inventive method and apparatus for processing bitstream data which includes coded object information. The elements of these independent claims, include the steps (or the means for implementing such steps): (1) receipt over time of audiovisual objects and associated composition information; (2) cache memory storage of the objects; (3) composing a scene from the cache-memory stored objects (4) and displaying the composed scene.

In contrast to applicants' invention for processing an object-encoded data bitstream, Escobar is concerned with making a "collage" presentation of discrete multimedia assets (such as "three dimensional wrap around sound, light shows, smoke generators, temperature controls, motion and acceleration simulators, smell generators and the like," "graphical elements, video elements, audio elements, still images, filming and the like," (See Escobar, col. 1 lines 42-56, and col. 2 lines 57-70). Escobar describes the delivery and presentation of multimedia applications using timelines to integrate various multimedia and program assets. Escobar, on occasion, uses the term 'objects' interchangeably with the term 'assets'. However, Escobar's multimedia assets/objects are not encoded data objects ("object-based coding, high-level structure of visual content") received in a data bitstream which is the subject of applicants' inventive processing. Escobar's multimedia assets/objects are merely different media types or categories. (See e.g., Escobar, col. 7: lines 35-48, "video assets from a video recorder, a variety of sounds recorded by an audio engineer, the film output from movie cameras with or without related audio tracks, and perhaps different films from different camera locations of the same scene shot by different cameras"). Further, Escobar's program objects are computer programs or software routines. (See e.g. Escobar, col. 8 lines 36- 56: "reusable

computer program objects,” col. 5 lines 17-18: “one program object reads the text source,” FIG. 4, and col. 8- lines 57-col. 9 line 8).

Thus, unlike applicants’ invention, Escobar is not concerned with the processing of object-encoded audiovisual compression data (i.e., bitstream objects) of a scene for enhanced display at an audiovisual terminal. In particular, Escobar fails to show, teach or suggest the elements of applicants’ independent claims 1, 8, 9 and 10. For example, Escobar does not show, teach or suggest “receiving, over time, a plurality of audio-visual/video objects and composition data for the objects.” As noted earlier, Escobar’s multimedia assets/objects are different types of media and Escobar’s programming objects are computer programs or subroutines that are locally developed and stored, but these are not audiovisual bitstream (coded) objects or scene composition information associated with the coded objects. (See e.g., Escobar, col. 6-line 66 - col. 7-line 3). Applicants note particularly that Escobar does not describe or suggest, the receipt of any contemporaneous composition information associated with the multimedia assets that Escobar uses for co-coordinating an artificial cut-and-paste playback presentation of the multimedia assets.

Further, for example, Escobar does not teach using cache memories to store bitstream encoded objects. Escobar only describes storing multimedia assets/objects in file servers connected to the network (see e.g., Escobar, FIG. 2, col. 4 lines 33-39, col. 7 lines 22-34) and listing them as icons in bins and file directories in Display/Edit Window 100 (see e.g., Escobar, FIGS. 1 and 2, col. 6 lines 11-34). Applicants respectfully submit that the storage bins and file directories/subdirectories of Escobar’s filing management scheme are not the same as a cache memory. (See e.g., Escobar, col. 6 lines 57-63). Thus, Escobar also does not teach either “composing” or “displaying” a scene using object information that is stored in a cache memory.

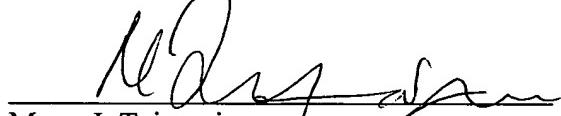
For at least the foregoing reasons, independent claims 1, 8, 9 and 10 are patentable over Escobar. Further, claims 2-7 that depend from claim 1 also are patentable for at least the same reasons. Accordingly, the prior art rejection of claims 1-10 should be withdrawn.

Conclusion

Applicants respectfully submit that this application is now in condition for allowance. Reconsideration and prompt allowance of which are requested.

If there are any remaining issues to be resolved, applicants request that the Examiner kindly contact the undersigned attorney for a telephone interview in order to advance the prosecution of this case.

Respectfully submitted,



Manu J. Tejwani
PTO Reg. No. 37,952
Attorney for Applicants
Baker Botts LLP
30 Rockefeller Plaza
New York, NY 10112
212-408-2614